# Safety Data Sheet

## 1. Product and Company Identification

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|---|---|
| **Product identifier** | **602T Porcelain Clear** |
| **Other means of identification** | Not available |
| **Recommended use** | Glazing Pottery |
| **Recommended restrictions** | None known. |
| **Manufacturer information** | Tucker's Pottery Supplies Inc.,<br>Cone Art Kilns Inc.<br>15 West Pearce Street<br>Richmond Hill, ON L4B 1H6 CA<br>Phone: Toll Free 1-800-304-6185<br>Phone: 905-889-7705<br>Emergency Phone Number: 613-996-6666 (CANUTEC) |
| **Supplier** | See above. |

## 2. Hazards Identification

| | | |
|---|---|---|
| **Physical Hazards** | Not classified | |
| **Health Hazards** | Serious eye damage/eye irritation<br>Sensitization, respiratory<br>Sensitization, Skin<br>Carcinogenicity<br>Specific target organ toxicity, single exposure<br>Specific target organ toxicity, repeated exposure | Category 2<br>Category 1<br>Category 1<br>Category 1A<br>Category 3<br>Category 1 |
| **Environmental Hazards** | Not classified | |
| **WHMIS 2015 defined hazards** | Not classified | |
| **Label elements** |  | |
| **Signal word** | Danger | |
| **Hazard statement** | Causes serious eye irritation. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure. | |
| **Precautionary statement** | | |

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| **Prevention** | Obtain special instructions before use. Do not handle it until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. |
| **Response** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists. Get medical advice/attention.<br>IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs, get medical advice/attention. Specific treatment (see information on this label).take off contaminated clothing and wash it before reuse.<br>IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: call a POISON CENTER/doctor |
| **Storage** | Store in a well-ventilated place. Keep the container tightly closed. Store locked up. |
| **Disposal** | Dispose of contents/container in accordance with local/regional/national/international regulations |
| **WHMIS 2015: Health hazards not otherwise classified (HHNOC)** | None known |
| **WHMIS 2015: Physical Health hazards not otherwise classified (PHNOC)** | None known |
| **Hazards not otherwise classified (HNOC)** | None known |
| **Supplemental information** | None. |

## 3. Composition/ Information on Ingredients

| Chemical Name | CAS number | % |
|---|---|---|
| Kaolin | 1332-58-7 | 15 |
| Nepheline syenite | 37244-96-5 | 15 |
| Glass Frit | Proprietary/ Mixture | 20 |
| Silica (Crystalline Quarts) | 14808-60-7 | 35 |

All concentrations are in percent by weight unless the ingredient is a gas. Gas concentrations are in percentage by volume.

## 4. First Aid Measures

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| **Inhalation** | IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. |
| **Skin contact** | IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs, Get medical advice/attention. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse. |
| **Eye contact** | |

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| | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. |
| **Ingestion** | Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention. |
| **Most important symptoms/effects, acute and delayed** | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Difficulty in breathing. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects. |
| **Indication of immediate medical attention and special treatment needed** | Provide general supportive measures and treat symptomatically. Symptoms may be delayed. |
| **General information** | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children. |

## 5. Fire Fighting Measures

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| **Suitable extinguishing media** | Water fog. Foam. Dry chemical powder. Carbon dioxide. |
| **Unsuitable extinguishing media** | Do not use water jet as an extinguisher, as this will spread the fire. |
| **Specific hazards arising from the chemical** | During fire, gases hazardous to health may be formed. |
| **Special protective equipment and precautions for firefighters** | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| **Fire-fighting equipment/instructions** | Use water spray to cool unopened containers. |
| **Specific methods** | Use standard firefighting procedures and consider the hazards of other involved materials. |
| **General fire hazards** | No unusual fire or explosion hazards noted. |
| **Hazardous combustion products** | May include and are not limited to: Silicon tetrafluoride. Hydrofluoric acid |

## 6. Accidental Release Measures

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| **Personal precautions, protective equipment and emergency procedures** | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |

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| **Methods and materials for containment and cleaning up** | Avoid dispersal of Dustin the air (i.e., clearing dust surfaces with compressed air). Minimize dust generation and accumulation. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material. If this is without risk.<br><br>Large spills: wet down with water and dike for later disposal. Shovel the material into a waste container. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush the area with water.<br><br>Small Spills: sweep up or vacuum up spillage and collect in a suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean the surface thoroughly to remove residual contamination. |
| **Environmental precautions** | Never return spills to the original container for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters. |

## 7. Handling and Storage

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| **Precautions for safe handling** | Obtain special instructions before use. Do not handle it until all safety precautions have been read and understood. Keep formation of airborne dust to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. When using, do not eat, drink or smoke. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using, do not eat or drink. |
| **Conditions for safe storage, including any incompatibilities** | store locked up. Store in the original tightly closed container. Store away from incompatible material. Keep out of reach of children. |

## 8. Exposure Controls/ Personal Protection

**Occupational exposure limits**

**Canada. Alberta OELs (occupational Health & Safety Code, Schedule 1, Table 2)**

| Components | Type | Value | Form |
|---|---|---|---|
| Crystalline Silica (CAS 14808-60-7) | TWA | 0.025 mg/m3 | Respirable particles |
| Kaolin (CAS 1332-58-7) | TWA | 2 mg/m3 | Respirable |
| Olivin, Cobalt Silicate Blue (CAS 68187-40-6) | TWA | 0.02 mg/m3 | Total dust |
| Limstone (CAS 1317-65-3) | TWA | 10 mg/m3 | |
| Titanium oxide (CAS13463-67-7) | TWA | 10mg/m3 | |

**Canada. British Columbia OELs (Occupational Exposure Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

| Components | Type | Value | Form |
|---|---|---|---|
| Crystalline Silica | TWA | 0.025 mg/m3 | Respirable fractions |

| | | | |
|---|---|---|---|
| (CAS 14808-60-7 | | | |
| Kaolin<br>(CAS 1332-58-7) | TWA | 2 mg/m3 | Respirable |
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | TWA | 0.02 mg/m3 | Total dust |
| Limstone<br>(CAS 1317-65-3) | STEL<br>TWA | 20 mg/m3<br>3 mg/m3 | Total dust<br>Respirable fractions |
| Titanium oxide<br>(CAS13463-67-7) | TWA | 3mg/m3 | Total dust |

**Canada. Manitoba OELs (Reg. 217/2006. The Workplace Safety and Health Act)**

| Components | Type | Value | Form |
|---|---|---|---|
| Crystalline Silica<br>(CAS 14808-60-7 | TWA | 0.025 mg/m3 | Respirable fractions |
| Kaolin<br>(CAS 1332-58-7) | TWA | 2 mg/m3 | Respirable |
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | TWA | 0.02 mg/m3 | Total dust |
| Titanium oxide<br>(CAS13463-67-7) | TWA | 10mg/m3 | Total dust |

**Canada. Ontario OELs (Control of Exposure to Biological or Chemical Agents)**

| Components | Type | Value | Form |
|---|---|---|---|
| Crystalline Silica<br>(CAS 14808-60-7 | TWA | 0.1 mg/m3 | Respirable fractions |
| Kaolin<br>(CAS 1332-58-7) | TWA | 2 mg/m3 | Respirable |
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | TWA | 0.02 mg/m3 | Total dust |
| Nepheline Syenite<br>(CAS 37244-96-5) | TWA | 10 mg/m3 | Total dust |
| Titanium oxide<br>(CAS13463-67-7) | TWA | 10mg/m3 | Total dust |

**Canada. Quebec OELs (Ministry of LAbor- Regulation Respecting the Quality if the Work Environment)**

| Components | Type | Value | Form |
|---|---|---|---|
| Carbonic acid, Magnesium salt (1:1) (CAS 546-93-0) | TWA | 10 mg/m3 | Total dust |
| Crystalline Silica | TWA | 0.025 mg/m3 | Respirable fractions |

| | | | |
|---|---|---|---|
| (CAS 14808-60-7 | | | |
| Kaolin<br>(CAS 1332-58-7) | TWA | 2 mg/m3 | Respirable |
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | TWA | 0.02 mg/m3 | Total dust |
| Limstone<br>(CAS 1317-65-3) | TWA | 10 mg/m3 | Total dust |
| Titanium oxide<br>(CAS13463-67-7) | TWA | 3mg/m3 | Total dust |

**Canada. OSHA tableZ-1 Limits for Air Contaminations(29 CFR 1910.1000)**

| Components | Type | Value | Form |
|---|---|---|---|
| Carbonic acid, Magnesium salt (1:1) (CAS 546-93-0) | PEL | 5 mg/m3 | Respirable fractions |
| Crystalline Silica<br>(CAS 14808-60-7 | PEL | 15 mg/m3<br>0.05 mg/m3 | Total dust<br>Respirable dust |
| Kaolin<br>(CAS 1332-58-7) | PEL | 5 mg/m3<br>15 mg/m3 | Respirable fractions<br>Total dust |
| Limstone<br>(CAS 1317-65-3) | PEL | 5 mg/m3<br>15 mg/m3 | Respirable fractions<br>Total dust |
| Titanium oxide<br>(CAS13463-67-7) | PEL | 15mg/m3 | Total dust |

**Canada. OSHA tableZ-3 (29 CFR 1910.1000)**

| Components | Type | Value | Form |
|---|---|---|---|
| Crystalline Silica<br>(CAS 14808-60-7 | TWA | 0.1 mg/m3 | Respirable |
| Kaolin<br>(CAS 1332-58-7) | TWA | 2.4 mppcf<br>5 mg/m3<br>15 mg/m3<br>50 mppcf<br>15 mppcf | Respirable<br>Respirable fractions<br>Total dust<br>Total dust<br>Respirable fractions |
| Titanium oxide<br>(CAS13463-67-7) | TWA | 5 mg/m3<br>15 mg/m3<br>50 mppcf<br>15 mppcf | Respirable fractions<br>Total dust<br>Total dust<br>Respirable fractions |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Crystalline Silica<br>(CAS 14808-60-7 | TWA | 0.025 mg/m3 | Respirable fractions |

| | | | |
|---|---|---|---|
| Kaolin<br>(CAS 1332-58-7) | TWA | 2 mg/m3 | Respirable |
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | TWA | 0.02 mg/m3 | |
| Titanium oxide<br>(CAS13463-67-7) | TWA | 10 mg/m3 | Total dust |

**US. NIOSH:Pocket Guide to Chemical Hazards**

| Components | Type | Value | Form |
|---|---|---|---|
| Carbonic acid, Magnesium salt (1:1) (CAS 546-93-0) | TWA | 5 mg/m3<br>10 mg/m3 | Respirable<br>Total |
| Crystalline Silica<br>(CAS 14808-60-7 | TWA | 0.05 mg/m3 | Respirable dust |
| Kaolin<br>(CAS 1332-58-7) | TWA | 5 mg/m3<br>10 mg/m3 | Respirable<br>Total |
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | TWA | 0.02 mg/m3 | Total dust |
| Limstone<br>(CAS 1317-65-3) | TWA | 5 mg/m3<br>10 mg/m3 | Respirable<br>Total dust |

### Biological limit values

**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---|---|---|---|---|
| Olivin, Cobalt Silicate Blue<br>(CAS 68187-40-6) | 15 Micro gr/l | Cobalt | Urine | * |

*- For sampling details, please see the source document.

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|---|---|
| **Exposure guidelines** | Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. |
| **Appropriate engineering controls** | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |

**Individual protection measures, such as personal protective equipment**

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| **Eye/face protection** | Wear safety glasses with side shields. |
| **Skin protection**<br>**Hand protection**<br>**Other** | <br>Impervious gloves. Confirm with a reputable supplier first.<br>Use of an impervious apron is recommended. As required by employer code. |

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| **Respiratory protection** | Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2) |
| **Thermal hazards** | Not applicable |
| **General hygiene considerations** | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using, do not eat or drink. |

## 9. Physical and Chemical Properties

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| **Appearance** | Powder |
| **Physical state** | Solid. |
| **Form** | Powder. |
| **Color** | Cream |
| **Odor** | Not Available |
| **Odor threshold** | Not available. |
| **pH** | Not Available |
| **Melting point/freezing point** | Not available. |
| **Initial boiling point and boiling range** | Not available. |
| **Pour point** | Not available. |
| **Specific gravity** | |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Flash point** | Not available. |
| **Evaporation rate** | Not available. |
| **Flammability (solid, gas)** | Not available. |
| **Flammability limit - lower(%)** | Not available. |
| **Upper/lower flammability or explosive limits** | Not available. |
| **Flammability limit - upper (%)** | Not available. |
| **Explosive limit - lower (%)** | Not available. |
| **Explosive limit - upper (%)** | Not available. |
| **Vapor pressure** | Not available. |
| **Vapor density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other information** | Not available. |
| **Explosive properties** | Not available. |
| **Oxidizing properties** | Not Oxidizing. |

## 10. Stability and Reactivity

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| **Ractivity** | This product may react with strong oxidizing agents. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Conditions to avoid** | Do not mix with other chemicals. |
| **Incompatible materials** | Powerful oxidizers. Chlorine. |
| **Hazardous decomposition products** | May include and are not limited to: Hydrofluoric acid. Silicon tetrafluoride. |

## 11. Toxicological Information

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| **Routes of Exposure** | Eye, Skin contact, Inhalation, Ingestion |

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| **Information on likely routes of Exposure** | |
| **Ingestion** | May cause stomach distress, nausea or vomiting |
| **Inhalation** | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Dust may irritate the respiratory system. |
| **Skin contact** | Dust or powder may irritate the skin. May cause an allergic reaction. |
| **Eye contact** | Causes serious eye irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Dust may irritate the respiratory tract, skin and eyes, coughing. Difficulty in breathing. May cause an allergic skin reaction. Dermatitis. Rash. |

**Information on toxicological effects**
**Acute Toxicity**

| Components | Species | Test Results |
|---|---|---|
| **Carbonic acid, magnesium salt (1:1) (CAS 546-93-0)** | | |
| **Acute** | | |
| Dermal LD50 | Not available | |
| Inhalation LD50 | Not available | |
| Oral LD50 | Not available<br>Rat | > 2000 mg/kg, ECHA |
| **Chemical Frits (containing lead) (CAS 65997-18-4)** | | |
| **Acute** | | |
| Dermal LD50 | Rat | > 2000 mg/kg, 24 Hours |
| Inhalation LD50 | Mouse<br>Mouse, Rat<br>Rabbit | > 9 mg/kg, 15 minutes, ECHA<br>> 1 mg/kg, 3 Hours, ECHA<br>> 22.4 mg/kg,15 minutes, ECHA<br>> 4.5 mg/kg, 2 hours, ECHA<br>> 8.6 mg/kg, 30 minutes, ECHA |

| | | |
|---|---|---|
| | Rat | > 4.5 mg/kg, 2 Hours, ECHA<br>> 1.9 mg/kg, 4 Hours, ECHA<br>> 112 mg/kg, 2 hours, ECHA<br>> 4.4 mg/kg, 4 hours, ECHA<br>> 2.2 mg/kg, 4 hours, ECHA |
| Oral<br>LD50 | Mouse | 890 mg/kg, ECHA<br>63 mg/kg, ECHA |
| | Mouse, Rat | 41 mg/kg, ECHA<br>7.7 mg/kg, ECHA |
| | Rat | >1100 mg/kg, ECHA<br>>5000 mg/kg, ECHA<br>>2000 mg/kg, ECHA<br>63-259 mg/kg, ECHA<br>9990 mg/kg, ECHA<br>8796 mg/kg, ECHA<br>2330 mg/kg, ECHA<br>314 mg/kg, ECHA<br>300-2000 mg/kg, ECHA<br>221 mg/kg, ECHA |
| **Crystalline Silica (CAS 14808-60-7)** | | |
| **Acute** | | |
| Dermal<br>LD50 | Not available | |
| Inhalation<br>LD50 | Not available | |
| Oral<br>LD50 | Rat | 500 mg/kg, HSDB, IV only |
| **Feldspar (CAS 68476-25-5)** | | |
| **Acute** | | |
| Dermal<br>LD50 | Not available | |
| Inhalation<br>LD50 | Not available | |
| Oral<br>LD50 | Not available | |
| **Kaolin (CAS 1332-58-7)** | | |
| **Acute** | | |
| Dermal<br>LD50 | Rat | >5000 mg/kg, HSDB |
| Inhalation<br>LD50 | Not available | |
| Oral<br>LD50 | Rat | >5000 mg/kg, HSDB<br>14900 mg/kg, Gelest |
| **Limestone (CAS 1317-65-3)** | | |
| **Acute** | | |

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|---|---|---|
| Dermal<br>LD50 | Not available | |
| Inhalation<br>LD50 | Not available | |
| Oral<br>LD50 | Rat | 6450 mg/kg, SPI Pharma |

**Nepheline Syenite (CAS 37244-96-5)**

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|---|---|---|
| **Acute** | | |
| Dermal<br>LD50 | Not available | |
| Inhalation<br>LD50 | Not available | |
| Oral<br>LD50 | Rat | |

**Olivine, Cobalt Silicate Blue (CAS 68187-40-6)**

| | | |
|---|---|---|
| **Acute** | | |
| Dermal<br>LD50 | Not available | |
| Inhalation<br>LD50 | Rat | >5.3 mg/L, 4 Hours, ECHA |
| Oral<br>LD50 | Rat | >2000 mg/L, ECHA<br>1830 mg/L, ECHA<br>1630 mg/L, ECHA<br>1480 mg/L, ECHA |

**Titanium Oxide (CAS 13463-67-7)**

| | | |
|---|---|---|
| **Acute** | | |
| Dermal<br>LD50 | Not available | |
| Inhalation<br>LD50 | Rat | |
| | Rat | >6.8 mg/L, 4 Hours, ECHA<br>>3.6 mg/L, 4 Hours, ECHA<br>>3.6 mg/L, 4 Hours, ECHA<br>>2.3 mg/L, 4 Hours, ECHA<br>5.1 mg/L, 4 Hours, ECHA<br>3.4 mg/L, 4 Hours, ECHA |
| Oral<br>LD50 | Mouse<br>Rat | >5000 mg/kg, ECHA<br>>25000 mg/kg, ECHA<br>>11000 mg/kg, ECHA<br>>5000 mg/kg, ECHA |

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| **Skin Corrosion/ irritation** | prolonged skin contact may cause temporary irritation. |

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| **Exposure minutes** | Not available |
| **Erythema value** | Not available |
| **Oedema value** | Not available |
| | |
| **Serious eye damage/ eye irritation** | Causes serious eye irritation |
| **Corneal opacity value** | Not available |
| **Iris lesion value** | Not available |
| **Conjunctival reddening value** | Not available |
| **Conjunctival oedema value** | Not available |
| **recovery days** | Not available |

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| **Respiratory sensitization** | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| **Skin sensitization** | May cause an allergic reaction. |
| **Mutagenicity** | No data available to indicate product or any components present at greater than 0.1 are mutagenic or genotoxic. |
| **Carcinogenicity** | May cause cancer.<br>In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)<br>In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)<br>According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits.<br>Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. |

## 12. Ecological Information

**Ecotoxicological dat**

**Titanium Oxide (CAS 13463-67-7)**

| Components | Species | Test Result |
|---|---|---|
| **Aquatic** | | |
| Crustacea (EC50) | Water flea (Daphnia magna) | >1000 mg/L, 48 hours |
| Fish (LC50) | Mummichog (Fundulus heteroclitus) | >1000 mg/L, 96 hours |

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|---|---|
| **Persistence and degradability** | No data available on the degradability of this product. |
| **Bioaccumulative potential** | No data available. |
| **Mobility in soil** | No data available. |
| **Mobility in general** | No data available. |
| **Other adverse effects** | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, |

endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal Consideration

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|---|---|
| **Disposal instructions** | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Local disposal regulations** | Dispose in accordance with all applicable regulations. |
| **Hazardous waste code** | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| **Waste from residues / unused products** | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| **Contaminated packaging** | Since emptied containers may retain product residue, follow label warnings even after the container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. |

## 14. Transport Information

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|---|---|
| **Transport of Dangerous Goods (TDG) Proof of Classification** | In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue. |

**U.S. Department of Transportation (DOT)**
Not regulated as dangerous goods**.**
**Transportation of Dangerous Goods (TDG - Canada)**
Not regulated as dangerous goods.

## 15. Regulatory Information

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|---|---|
| **Canadian federal regulations** | This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR. |
| **Canada CEPA Schedule 1: Listed substance** | |
| Cristobalie (CAS 14464-46-1) | Listed |
| Kaolin (CAS 1332-58-7) | Listed |
| Titanium Oxide (CAS 13463-67-7) | Listed |
| **Canada DSL Challenge Substances: Listed substance** | |
| Cristobalie (CAS 14464-46-1) | Listed |
| Crystalline Silica (CAS 14808-60-7) | Listed |
| **Canada Priority substances List (second list): Listed substance** | |
| Kaolin (CAS 1332-58-7) | Listed |
| Titanium Oxide (CAS 13463-67-7) | Listed |
| **Export Control List (CEPA 1999, Schedule 3)** | Not Listed |

| | |
|---|---|
| **Greenhouse Gases** | Not listed |
| **Precursor Control Regulations** | Not regulated |
| **WHMIS 2015 Exemptions** | Not applicable |
| **US federal regulations** | This product is a Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
| **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** | Not regulated |

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | Listed |

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

| | |
|---|---|
| Cristobalite (CAS 14464-46-1) | Cancer |
| Crystalline silica (CAS 14808-60-7) | Cancer |
| Cristobalite (CAS 14464-46-1) | lung effects |
| Crystalline silica (CAS 14808-60-7) | lung effects |
| Cristobalite (CAS 14464-46-1) | immune system effects |
| Crystalline silica (CAS 14808-60-7) | immune system effects |
| Cristobalite (CAS 14464-46-1) | kidney effects |
| Crystalline silica (CAS 14808-60-7) | kidney effects |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

| | |
|---|---|
| **Hazard category** | Immediate Hazard-Yes<br>Delayed Hazard-Yes<br>Fire Hazard-No<br>Pressure Hazard-No<br>Reactivity Hazard- No |
| **SARA 302 Extremely hazardous substance chemical** | No |
| **SARA 311/312 Hazardous chemical** | No |
| **SARA 313 (TRI reporting)** | Not regulated |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollution (HAPs)**

Olivine, Cobalt Silicate Blue (CAS 68187-40-6)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Other federal regulations**

| | |
|---|---|
| **US- California Hazardous Substances: Listed substance** | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | Listed |
| **US- Illinois Chemical Safety Act: Listed substance** | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | Listed |
| **US- Louisiana Spill Reporting Chemical Safety Act: Listed substance** | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | Listed |
| **US - Minnesota Haz Subs: Listed substance** | |
| Carbonic acid, magnesium salt (1:1) (CAS 546-93-0) | Listed |
| Cristobalite (CAS 14464-46-1) | Listed |
| Crystalline silica (CAS 14808-60-7) | Listed |
| Kaolin (CAS 1332-58-7) | Listed |
| limestone (CAS 1332-58-7) | Listed |

| | |
|---|---|
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | Listed |
| Titanium oxide (CAS 13463-67-7) | Listed |
| **US - New Jersey RTK - Substances: Listed substance** | |
| Carbonic acid, magnesium salt (1:1) (CAS 546-93-0) | |
| Cristobalite (CAS 14464-46-1) | |
| Crystalline silica (CAS 14808-60-7) | |
| Kaolin (CAS 1332-58-7) | |
| limestone (CAS 1332-58-7) | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | |
| Titanium oxide (CAS 13463-67-7) | |
| **US - Texas Effects Screening Levels: Listed substance** | |
| Carbonic acid, magnesium salt (1:1) (CAS 546-93-0) | Listed |
| Cristobalite (CAS 14464-46-1) | Listed |
| Crystalline silica (CAS 14808-60-7) | Listed |
| Kaolin (CAS 1332-58-7) | Listed |
| limestone (CAS 1332-58-7) | Listed |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | Listed |
| Titanium oxide (CAS 13463-67-7) | Listed |
| Nepheline syenite (CAS 37244-96-5) | Listed |
| Feldspar (CAS 68476-25-5) | Listed |
| **US. Massachusetts RTK - Substance List** | |
| Carbonic acid, magnesium salt (1:1) (CAS 546-93-0) | |
| Cristobalite (CAS 14464-46-1) | |
| Crystalline silica (CAS 14808-60-7) | |
| Kaolin (CAS 1332-58-7) | |
| limestone (CAS 1332-58-7) | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | |
| Titanium oxide (CAS 13463-67-7) | |
| **US. New Jersey Worker and Community Right-to-Know Act** | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | |
| **US. Pennsylvania Worker and Community Right-to-Know Law** | |
| Carbonic acid, magnesium salt (1:1) (CAS 546-93-0) | |
| Cristobalite (CAS 14464-46-1) | |
| Crystalline silica (CAS 14808-60-7) | |
| Kaolin (CAS 1332-58-7) | |
| limestone (CAS 1332-58-7) | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | |
| Titanium oxide (CAS 13463-67-7) | |
| **US. Rhode Island RTK** | |
| Carbonic acid, magnesium salt (1:1) (CAS 546-93-0) | |
| Cristobalite (CAS 14464-46-1) | |
| Crystalline silica (CAS 14808-60-7) | |
| Kaolin (CAS 1332-58-7) | |
| limestone (CAS 1332-58-7) | |
| Olivine, Cobalt Silicate Blue (CAS 68187-40-6) | |
| Titanium oxide (CAS 13463-67-7) | |
| **US. California Proposition 65** | |
| WARNING: This product contains a chemical known to the State of California to cause cancer. | |
| **US - California Proposition 65 - CRT**: Listed date/Carcinogenic substance | |
| Crystalline silica (CAS 14808-60-7) Listed: October 1, 1988 | |
| Titanium oxide (CAS 13463-67-7) Listed: September 2, 2011 | |

**Inventory Status**

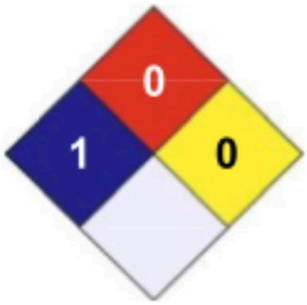
| Country(s) Or Region | Inventory name |
|---|---|
| Canada | Domestic Substances List (DSL)——> No |
| Canada | Non-Domestic Substances List (NDSL) ——>Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA)——>Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 16. Other Information

| LEGEND | |
|---|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | | |
|---|---|---|
| HEALTH | * | 1 |
| FLAMMABILITY | | 0 |
| PHYSICAL HAZARD | | 0 |
| PERSONAL PROTECTION | | X |




| | |
|---|---|
| **Disclaimer** | The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document. |
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| **Prepared by** | Dell Tech Laboratories Ltd. Phone: (519) 858-5021 |
| **Other information** | For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document. |